

Dr. Aleck Bernstein
London, England

Dear Aleck:

As you probably know, Esther and I are hopefully trying to arrange a visit to London next March— the prospects look pretty good.

The immediate business purpose of this letter is to ask for some information on the records of wg57, and to tell you what we have been doing along these lines. It was very evident from the difficulties that you, and Skear before you, had encountered on the immunogenetics of *E. coli*, that this kind of work had to be done by a specialist in that field, and preferably in a lab. specifically devoted to it. When Kauffmann mentioned that Frits and Ida Ørskov were interested in developing a back-ground in genetics, this seemed like a golden opportunity, and they have just arrived on a year's fellowship; I am hopeful they will take back enough of the technology with them to be able to exploit the unexploited resources of their own laboratory for the serological end of the work. They are making a fresh start with the sero-type strains of *E. coli*, as the serological problems seem to be more formidable than the genetic, but are also reviewing some old history to straighten out the records.

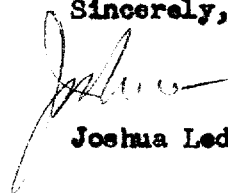
When I sent Ørskov our collection of wg strains for serological typing, I was surprised to get the report that wg57 (-W-2691) was not O55, but was identical with the type strain O25 (-wg55). There obviously had been some clerical confusion-- and now that I recall it, there was at the time. Ewing's 589-52 (his label for what we thought was W-2691) is O55 and not-fertile/. There is not much profit in pursuing this matter, but I just wanted to ask whether you had made any serological tests on this culture. If you did have an O55 report, this would encourage the hope that there is such a strain around that is fertile.

At present, the main trouble is the one you encountered: keeping the serological integrity of the stocks, especially in mutants.

The main new development here has been our work on protoplasts and L-forms; we have worked out how to cultivate the L-forms of K-12 mutants, but so far have gotten nothing of new genetic interest from it. Hfr protoplasts will mate, not quite as well as the rods-- however, I've just been looking at some india-ink preparations, and there is a definite capsule around the protoplast which may represent the remains of the de-rigidified surface. F- x F- crosses and attempted transductions of markers by extracts (dna) have not succeeded with this material.

Give our best of course to Andy and Olive & Helen and Bruce... we're looking forward to seeing all of you.

Sincerely,



Joshua Lederberg